

Amendments to the Drawings:

The attached replacement sheet of drawings include changes to FIG. 3, and replaces the original sheet including FIG. 3.

Descriptive legends within FIG. 3 were amended to correspond with the specification. No new matter has been added.

Replacement Sheets (1 page)

REMARKS

Claims 1-27 were pending in the application. Claims 1-3, 6, 8-12, 15, 17-22 and 24-27 have been amended. Claim 28 is newly submitted. No new matter has been added. Accordingly, claims 1-28 are currently pending in the application. Reconsideration is respectfully requested in view of the amendments to the claims and the following remarks.

I. The § 102 Rejections

Claims 1-27 were rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,675,163 (“Bass”). Applicant respectfully traverses.

Claim 1, as amended, recites a method for optimizing leaf comparisons from a tree search of data stored in a tree structure. The method includes providing a control structure for leaf data comparisons. The control structure includes a control vector and a match key, in which the control vector indicates a type of comparison test to be performed on the match key. The method further includes storing the control structure including the control vector and the match key within a leaf of the tree structure.

A. Bass Fails To Disclose a Storing a Control Structure Including a Control Vector of the Kind Recited In Claim 1 Within a Leaf of a Tree Structure

Bass discloses a method and apparatus for finding a full match between a search pattern and a pattern stored in a leaf of a search tree (see Abstract). In particular, Bass discloses a Patricia tree structure having leaves that stores hash keys. Each leaf corresponds to a single key that matches exactly an input key (of a search algorithm) (col. 4, ll. 24-47). Fig. 5 of Bass illustrates a leaf that contains a key, along with aging information and user information (col. 9, ll. 17-25).

While Bass discloses storing a key within a leaf of a tree structure, Bass fails to disclose storing a control vector within the leaf of the tree, in which the control vector indicates a type of comparison test to be performed on the key, as recited in claim 1. Instead, Bass discloses that the type of search action to be performed on a key (within a leaf of Bass's Patricia tree structure) resides in a lookup definition table (LUDefTable). The LUDefTable is implemented as three separate random access memories which are not contained within a leaf (col. 10, ll. 5-16). Claim 1 is, therefore, allowable over Bass.

Claims 2-9 and 28 depend from claim 1, and are allowable over Bass for at least the same reason as those set forth with claim 1.

B. Other Independent Claims

Claims 10, 19, 26 and 27 incorporate limitations similar to those of claim 1. Claims 10, 19, 26 and 27 (and the claims that depend therefrom) are also allowable over Bass for reasons corresponding to those set forth with respect to claim 1.

In view of the foregoing, it is submitted that the claims 1-28 are allowable over the cited references and are in condition for allowance. Should any unresolved issues remain, Examiner is invited to call Applicants' attorney at the telephone number indicated below.

Respectfully submitted,
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